

Serial No. 10/676,762

Atty Dkt No. LEM 0120 PUSA

SPECIFICATION

A. After the title of the invention, on page 1, at line 2, and continuing to page 2, at line 3, please amend the application as shown below:

1. Field of Invention

[The] This invention relates to a reflector lamp, particularly to a metal halide reflector lamp.

2. Background of the Invention

In European Patent EP 0 902 458 A2 a metal halide reflector lamp is shown comprising an outer envelope formed as a reflector with a neck portion and a base[.]. A [a] light transmitting cover[, particularly] in the form of a lens [which] is connected along its circumference [is connected] to an outer edge of the reflector, whereby reflector, base and cover are shaped generally rotationally symmetrical around a longitudinal axis[, and]. A light capsule or an arc tube, resp., having pinch seals at its ends and being surrounded by a shield formed as a tubular envelope and being arranged in the reflector within the shield by means of a first and a second electric lead[-in,]. [the] The first lead[-in] is at [the] a first end of the capsule [at the side of] adjacent the base, and the second lead[-in] is [being] installed on the outside of the shield and is introduced into the other [its] end of the shield opposite [at the side of] the cover[, at] adjacent the second end of the capsule [at the side of the cover,] with both leads being sealed [each] in the [respective] pinch seal adjacent the base. The [A] reflector lamp shown in [of this kind is known (EP 0 902 458 A2) in which] EP 0 902 458 A2 has a melting-in of the tubular envelope of the shield [is provided] in the base area such that the two leads [lead-ins] emerging from the base area are sealed into this pinch seal-like melting-in from which they exit [then] in order to enter into pinch seals at opposite ends [again, at this time into the pinch seals] of the capsule. The shield thereby provides a so-called burst protection which protects the environment as against shards of a capsule which could explode possibly sometimes.

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B. *Please amend the second full paragraph beginning on page 2, at line 17, as shown below:*

Even if this known structure is relatively compact already, the presence of a melt-in of the leads [lead-ins] into the pinch seal-like end of the shield opposite [on the side of] the base and the use of protective gas constitutes a remarkable manufactural-technical expenditure on the one hand [side], on the other hand [side] such melt-in makes the shield longer and by this enlarges the reflector lamp in the direction of its longitudinal axis.

C. *Please amend the three full paragraphs beginning on page 3, at line 3, as shown below:*

Finally the EP 0 560 936 B1 teaches a reflector lamp with a cylindrical shield which is retained by special clips which at least partially grip around the circumference of the shield at its two ends. The clips form part of a separate maintenance structure for the shield which comprises a holding web between the two clips and a special holding ring for the holding web in the base area [aera] of the lamp. This complicated maintenance structure for the shield forms a special expenditure.

SUMMARY OF THE INVENTION

In view of this the object underling the invention is seen in the provision of a reflector lamp of this kind which can be manufactured with remarkably lesser expenditure and which, beyond that, is structurally [structured] more compact, i. e., is shorter in the direction of its longitudinal or rotational, resp., axis.

This object is solved in accordance with the invention in that, eliminating [renouncing] melt-ins of the electric leads [lead-ins] within the shield which seal the capsule as against the environment, the leads [lead-ins] are fixed in the base only, and in that the second lead[-in] is biased such that, by this second lead[-in] which abuts from the outside against the end of the shield adjacent [on the side of] the cover or lens, the shield is pressed

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against a bottom of the neck portion of the reflector, the leads [lead-ins] being guided through openings in this bottom towards the base, which is secured to the bottom, and are fixed there.

D. On page 6, at line 19, please insert the following title, as shown below:

BRIEF DESCRIPTION OF THE DRAWINGS

E. On page 7, at line 2, please insert the following title, and amend the paragraphs beginning thereafter and continuing onto page 8, line 14, as shown below:

DETAILED DESCRIPTION

Fig. 1 illustrates a first embodiment of a reflector lamp 1, particularly a metal halogen vapor reflector lamp, having an outer envelope formed as a reflector 2 with a neck region 3 having a base 4 fixed thereon and [as] a light transmitting cover 5[, particularly] comprising a lens which along its circumference 6 is connected to an outer edge 7 of the reflector 2.

Reflector 2, base 4 and lens or cover 5 are formed essentially rotationally symmetrically [symmetrical] around a longitudinal axis 8.

Between base 4 and lens [cover] 5 [an] a light capsule or arc tube 9 having pinch seals 10 and 11 at its ends is arranged in the reflector 2 and is surrounded by a shield 14 in the shape of a tubular envelope. The shield can serve not only as a burst protection but can also consist of UV absorbent glass or can be coated with a UV absorbent layer in order to avoid an undesirable sodium loss. The arc tube 9 is held within the shield 14 by a first and by a second lead[-in] 12 and 13, the first lead[-in] 12 being sealed-in at the first arc tube end 15 near [at the side of] the base 4 and the second lead[-in] 13 being sealed-in at the second arc tube end 16 near [at the side of] the lens 5 [cover], each within pinch seals 10, 11. The

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arrangement of the arc tube 9 is done preferably concentrically along the rotational or longitudinal, resp., axis 8.

The second lead[-in] 13 is installed on the outside of the shield 14 and is inserted in the end 17 of same adjacent [at the side of] the lens [cover] 5.

In accordance with the invention, eliminating [renouncing] melt-ins of the leads [lead-ins] 12, 13 within the shield 14 which seal the light capsule or arc tube 9 against the environment, the leads [lead-ins] 12, 13 are fixed or supported from [in] the base 4 only. Further, the second lead[-in] 13 is biased such that, by this second lead[-in] 13 which abuts from the outside at 17' against the end 17 of the shield 14 adjacent [on the side of] the lens [cover] 5, the shield 14 is pressed against the [a] bottom 18 of the neck portion 3 of the reflector 2, the leads [lead-ins] 12, 13 being guided through openings 19, 20 in this bottom 18 towards the base 4, which is secured to the bottom 18, and are secured there or mechanically fixed, resp. The ends of the leads [lead-ins] 12 and 13 are electrically connected with terminals 21 and 22 fixed within base 4.

F. *Please amend the paragraph beginning on page 8, at line 18, as shown below:*

The second embodiment of the reflector lamp 1a illustrated in Fig. 2 corresponds essentially to the first embodiment according to Fig. 1 with the exception of the fact that the shield 14 is open adjacent [at the side of] the lens [cover] 5 the same way it is adjacent [as at the side of] the base, in other words, the shield is a cylinder open at both ends. Thereby the second lead-in 13 lies in the region 17' at the bottom [upper] edge of the shield 14 and presses same against bottom 18.

G. *Please amend the two paragraphs beginning on page 9, lines 19, and continuing onto page 10, as shown below:*

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Suitably a second heat protection 23A [(not shown)] can be provided which surrounds the end 16 of the arc tube 9 at the side of the cover 5 in the region of its pinch seal 11 above [below] the welding between lead-in and melted-in foil and lies opposite to the lower [upper] end 17 of shield 14 interiorly.

With the fourth embodiment of the reflector lamp 1c illustrated in Fig. 4, between the first end 15 of the arc tube 9 at the side of the base and the shield 14 on the one hand as well as also between the shield 14 and the reflector neck 3 on the other hand, cement 28 is inserted such that firstly a cooling effect is achieved which prevents an oxidation of the welding between lead[-in] 12 and melted-in foil, and secondly the whole structure becomes even more stable [stabile].